Square Five Axis Load Cell

Model TR5D-B-5K

- 5,000 lbf force capacity
- 600 lbf · ft moment capacity
- Measures three perpendicular forces and two moments
- Environmentally protected
- Temperature compensated
- Rugged stainless steel construction



Description

The TR5D-B-5K transducer is capable of measuring forces and moments. It provides independent outputs for vertical, lateral, and longitudinal forces as well as two overturning (bending) moments. This compact transducer is configured for easy adaptation to a variety of applications.

High grade stainless steel and weatherproof sealing combine to provide excellent resistance to corrosion and environmental conditions, making the transducer suitable for in-field testing. Temperature compensation of the transducer ensures stable output throughout a wide temperature range.

Specifications

| Maximum Force Capacity (Fx, Fy, Fz) | 5,000 lbf (22 kN) |
|-------------------------------------|--|
| Maximum Moment Capacity (Mx, My) | 600 lbf · ft (815 N · m) |
| Full Scale Output | 2.5 mV/V nominal, Fx, Fy 2.0 mV/V nominal, Fz, Mx, My |
| Sensor | 5 four-arm strain gauge bridges |
| Nonlinearity | <0.5 % of full scale output |
| Hysteresis | < 0.5 % of full scale output |
| Temperature Range, Usable | -40 °F to 300 °F (-40 °C to 149 °C) |
| Excitation Voltage, Maximum | 10 Vdc or Vac rms |
| Standard Cable Length | 10 ft (3.05 m) shielded, open-ended leads |

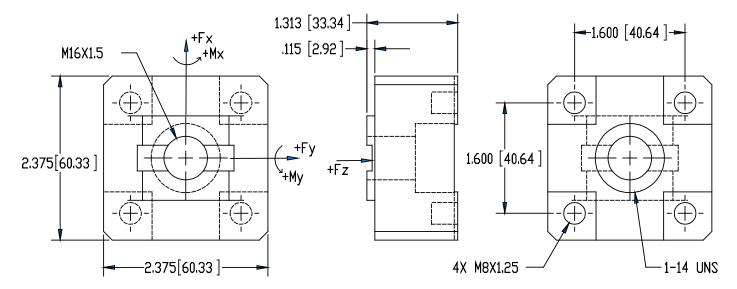
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TR5D-B-5K Configuration



Dimensions are in inch [mm]; all tolerances are ± 0.005 in [± 0.13 mm] unless otherwise specified. Maximum recommended pilot depth is 0.030 in [0.76 mm]

Positive outputs result when the transducer top is displaced relative to the transducer base in the directions indicated.

Ordering Options

Connectors and optional cable length may be specified by the customer Contact Michigan Scientific for information on transducer applications and mounting.

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